### **Telehealth Clinic Appointment Web App**

Report document prepared by Antonio Mosquera

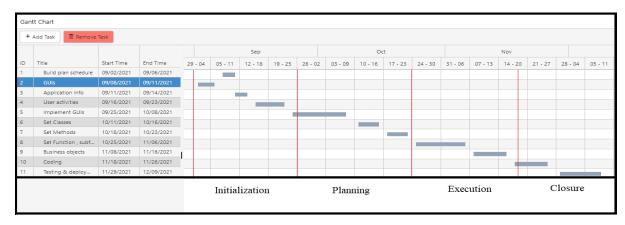
#### Phase 1: Organizing and Planning: Project Plan

To implement the project, Python was used as a programming language, professional PyCharm was used as an integrated development environment (IDE).

- To address this project, the six-core process of the Software Development Life Cycle (SDLC) was followed. Included Object-oriented analysis and Design (OOAD).
- The requirements and non-requirements were defined, also, It was used the framework FURPS+
- Used Agile development, user and client were interviewed in the project. Also, In Scrum, the owner of the software maintains the product backlog list.
- User cases, entity-relationship diagram, domain model, class diagrams, GUIs.



#### GUI of the index



Gantt Chart of the Schedule (proposed) follow the SDLC

Phase 2: Prototype Development 1



Front-end was implemented by using Html, CSS, JavaScript, Bootstrap, the navigation bar included home, participants, appointments, video, calendar, and chat, etc.

## **Phase 3: Prototype Development 2**

The back end + relational database was created using PostgreSQL

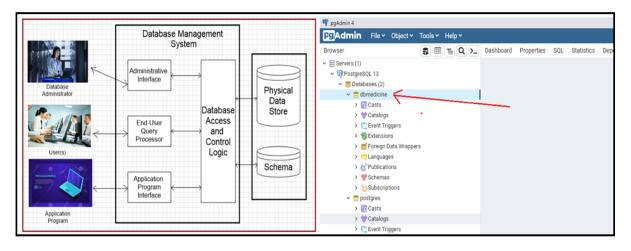
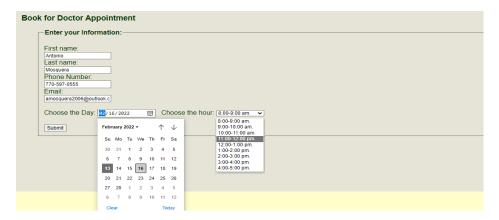


Diagram 3C DBMS and DB Components and their interactions with Application Programs

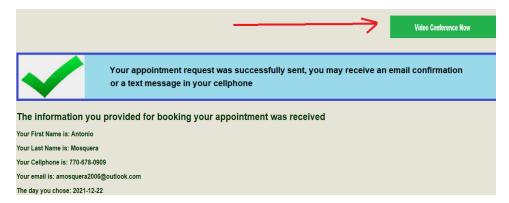
The classes patients, doctors, stuff, appointments, etc. are included in DB with the relational tables.

# Phase 4: Prototype Development 3

1. During this phase, the appointment module implemented, it can set the day of the appointment, the time of the appointment, the email address for the confirmation of the appointment.



After clicking the submit button, the system displays the confirmation



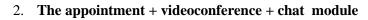
And the same time, a formal confirmation is sent to the email address of the patient, the link for performing the teleconference may be included.



The appointment module has a button link for connect to the patient - doctor in real time that button provides videoconference and online chat services through a cloud-based peer-to-peer software platform from <a href="https://www.jitsi.org">www.jitsi.org</a> that is embedded in the telemedicine website, The web is able to

# Project Telehealth Application using Python with Django Framework

implement similar software such as www.zoom.us or apps.google.com/meet/, etc. I chose <a href="https://www.jitsi.org">www.jitsi.org</a> because it is very easy to implement.





The goals of the Telehealth website were achieved according to the schedule that follow the SDLC.